

CLAIMS

What is claimed is:

- 5 1. A system configured to alter the behavior of a virtual bus interface that produces bus-type transactions from point-to-point transactions, the system comprising:
 - a detection logic configured to detect that a point-to-point transaction to be processed by the virtual bus interface is a transaction for which no bus-type transaction is to be produced; and
 - 10 a tracking logic operably connected to the detection logic, the tracking logic being configured to track the point-to-point transaction as it is processed by the virtual bus interface and to selectively suppress the generation of a bus-type transaction by a translation logic in the virtual bus interface.
- 15 2. The system of claim 1, where the detection logic is configured to detect that a point-to-point transaction is a transaction for which no bus-type transaction is to be produced by examining a packet identifier in a header packet associated with the point-to-point transaction.
- 20 3. The system of claim 1, where the tracking logic is configured to suppress the generation of a bus-type transaction by the translation logic in the virtual bus interface by updating a value in a data structure associated with tracking the point-to-point transaction, where the value is referenced by the translation logic before providing a bus-type transaction.
- 25 4. The system of claim 1, where the tracking logic is configured to suppress the generation of a bus-type transaction by the translation logic in the virtual bus interface by updating a value in a data store associated with tracking the point-to-point transaction, where the value is referenced by the translation logic before providing a bus-type transaction.
- 30 5. The system of claim 1, where the tracking logic is configured to suppress the generation of a bus-type transaction by the translation logic in the virtual bus interface by marking the point-to-point transaction with a suppression tag, where the tag is referenced by the translation logic before providing a bus-type transaction.

6. The system of claim 1, where the point-to-point transaction comprises a null-type transaction.

5

7. The system of claim 1, where the point-to-point transaction comprises a point-to-point internal transaction.

8. The system of claim 1, where the detection logic is further configured to receive an
10 input from a user, where the input identifies a point-to-point transaction type to be suppressed.

9. A virtual bus interface system configured to selectively produce a bus-type transaction from a point-to-point type transaction, comprising:

15 a point-to-point transaction logic configured to receive a packet associated with a point-to-point transaction from a point-to-point linked system;

a detection logic configured to determine whether the packet identifies the point-to-point transaction as a transaction for which no bus-type transaction is to be produced;

20 a bus-type transaction logic configured to selectively produce a bus-type transaction from a point-to-point transaction received by the point-to-point transaction logic;

a tracking logic configured to track a point-to-point transaction as it processed into a bus-type transaction by the bus-type transaction logic; and

25 a suppression logic configured to control the bus-type transaction logic to selectively produce a bus-type transaction from the point-to-point transaction, based, at least in part, on the determination made by the detection logic.

10. The system of claim 9, where upon detecting that a point-to-point transaction is a transaction for which no bus-type transaction is to be produced, the detection logic stores a value in a data structure associated with the virtual bus interface system, where the value uniquely identifies the transaction, and where the suppression logic controls the bus-type transaction logic based, at least in part, on the value.

11. The system of claim 9, where upon detecting that a point-to-point transaction is a transaction for which no bus-type transaction is to be produced, the detection logic stores a value in a data store associated with the virtual bus interface system, where the value uniquely identifies the transaction, and where the suppression logic controls the bus-type transaction logic based, at least in part, on the value.
- 5
12. The system of claim 9, where upon detecting that a point-to-point transaction is a transaction for which no bus-type transaction is to be produced, the detection logic marks the transaction as a transaction for which no bus-type transaction is to be produced, and where the suppression logic controls the bus-type transaction logic based on the marking.
- 10
13. The system of claim 9, where the detection logic is configured to detect one or more of, a null-type transaction, a point-to-point internal transaction, and a user-specified transaction.
- 15
14. A method, comprising:
- detecting a completion event associated with a point-to-point transaction being received in a virtual bus interface;
- determining whether the point-to-point transaction is a transaction for which no bus-type transaction is to be produced; and
- selectively suppressing production by the virtual bus interface of a bus-type transaction from the point-to-point transaction.
- 20
15. The method of claim 14, including manipulating a memory location to identify the point-to-point transaction to the virtual bus interface as a transaction for which no bus-type transaction is to be produced.
- 25
16. The method of claim 14, including marking the point-to-point transaction to identify the point-to-point transaction to the virtual bus interface as a transaction for which no bus-type transaction is to be produced.
- 30
17. The method of claim 14, including selectively suppressing the production of a bus-type transaction from the point-to-point transaction when the point-to-point transaction

comprises one or more of, a null-type transaction, a point-to-point internal transaction, and a user-specified transaction.

18. A computer-readable medium storing processor executable instructions operable to
5 perform a method, the method comprising:

detecting a completion event associated with a point-to-point transaction being
received in a virtual bus interface;
determining whether the point-to-point transaction is one of, a null-type transaction, a
10 point-to-point internal transaction, and a user-specified transaction for which no bus-type
transaction is to be produced;

15 upon determining that the point-to-point transaction is a transaction for which no bus-
type transaction is to be produced, performing one or more of, manipulating a memory
location to identify the point-to-point transaction to the virtual bus interface as a transaction
for which no bus-type transaction is to be produced, and marking the point-to-point
transaction to identify the point-to-point transaction to the virtual bus interface as a
transaction for which no bus-type transaction is to be produced; and

20 selectively suppressing production by the virtual bus interface of a bus-type
transaction from the point-to-point transaction based on one or more of, the marking and the
manipulated memory location.

19. A system, comprising:

means for determining whether a packet associated with a point-to-point transaction
received by a virtual bus interface identifies the point-to-point transaction as a transaction
type for which no bus transaction is to be produced by the virtual bus interface;

25 means for identifying a packet and a point-to-point transaction for which no bus
transaction is to be produced to the virtual bus interface to facilitate processing a subsequently
received packet associated with the point-to-point transaction for which no bus transaction is
to be produced by the virtual bus interface; and

30 means for suppressing the generation of a bus transaction from a point-to-point
transaction based, at least in part, on the identification of the point-to-point transaction for
which no bus transaction is to be produced by the virtual bus interface.

20. A set of application programming interfaces embodied on a computer-readable medium for execution by a computer component in conjunction with suppressing the generation of a bus model transaction from a point-to-point link transaction presented to a virtual bus interface, comprising:

- 5 a first interface for communicating a point-to-point transaction;
- a second interface for communicating a suppression data configured to facilitate suppressing the generation of a bus model transaction from the point-to-point transaction; and
- a third interface for communicating a suppressed transaction tracking data, where the suppressed transaction tracking data facilitates processing packets logically related to the point-to-point transaction for which the generation of a bus model transaction is to be suppressed.

10